

In the Claims

The following list of claims will replace all prior versions and listings of claims in the Application. Please amend the claims as follows.

1-102. (Cancelled)

103. (New) A mixture of conjugates each comprising a human growth hormone drug coupled to an oligomer that comprises a polyalkylene glycol moiety and a lipophilic moiety that comprises one or more linear, saturated or unsaturated alkyl moieties having 1 to 28 carbon atoms, said mixture having a molecular weight distribution with a standard deviation of less than about 22 Daltons.

104. (New) The mixture of claim 103, wherein the lipophilic moiety comprises one or more linear, saturated or unsaturated alkyl moieties having 2 to 12 carbon atoms.

105. (New) The mixture of claim 103, wherein the lipophilic moiety comprises one or more linear, saturated or unsaturated alkyl moieties having 4, 5 or 6 carbon atoms.

106. (New) A method of treating human growth hormone deficiency in a subject in need of such treatment, said method comprising:

administering an effective amount of a mixture of conjugates, each comprising a human growth hormone drug coupled to an oligomer that comprises a polyalkylene glycol moiety and a lipophilic moiety that comprises one or more linear, saturated or unsaturated alkyl moieties having 1 to 28 carbon atoms, said mixture having a molecular weight distribution with a standard deviation of less than about 22 Daltons, to the subject to treat the human growth hormone deficiency.

107. (New) The method of claim 106, wherein the lipophilic moiety comprises one or more linear, saturated or unsaturated alkyl moieties having 2 to 12 carbon atoms.

108. (New) The method of claim 106, wherein the lipophilic moiety comprises one or more linear, saturated or unsaturated natural fatty acid moieties having 4, 5 or 6 carbon atoms.

109. (New) A method of accelerating the growth rate of a human subject, said method comprising:

administering to the human subject a mixture of conjugates each comprising a human growth hormone drug coupled to an oligomer that comprises a polyalkylene glycol moiety and a lipophilic moiety that comprises one or more linear, saturated or unsaturated alkyl moieties having 1 to 28 carbon atoms, said mixture having a molecular weight distribution with a standard deviation of less than about 22 Daltons, in an amount sufficient to accelerate the human subject's growth rate.

110. (New) The method of claim 109, wherein the lipophilic moiety comprises one or more linear, saturated or unsaturated alkyl moieties having 2 to 12 carbon atoms.

111. (New) The method of claim 109, wherein the lipophilic moiety comprises one or more linear, saturated or unsaturated natural fatty acid moieties having 4, 5 or 6 carbon atoms.

112. (New) A substantially monodispersed mixture of conjugates, each conjugate comprising a human growth hormone drug coupled to an oligomer that comprises a polyalkylene glycol moiety and a lipophilic moiety that comprises one or more linear, saturated or unsaturated alkyl moieties having 1 to 28 carbon atoms.

113. (New) The mixture of claim 112, wherein the lipophilic moiety comprises one or more linear, saturated or unsaturated alkyl moieties having 2 to 12 carbon atoms.

114. (New) The mixture of claim 112, wherein the lipophilic moiety comprises one or more linear, saturated or unsaturated natural fatty acid moieties having 2 to 18 carbon atoms.

115. (New) A mixture of conjugates each comprising a human growth hormone drug coupled to a polymer having a polyalkylene glycol moiety and a lipophilic moiety that comprises one or more linear, saturated or unsaturated alkyl moieties having 1 to 28 carbon atoms, wherein the mixture has a dispersity coefficient (DC) greater than 10,000 where

$$DC = \frac{\left(\sum_{i=1}^n N_i M_i \right)^2}{\sum_{i=1}^n N_i M_i^2 \sum_{i=1}^n N_i - \left(\sum_{i=1}^n N_i M_i \right)^2}$$

wherein:

n is the number of different molecules in the sample;

N_i is the number of ith molecules in the sample; and

M_i is the mass of the ith molecule.

116. (New) The mixture of claim 115, wherein the lipophilic moiety comprises one or more linear, saturated or unsaturated alkyl moieties having 2 to 12 carbon atoms.

117. (New) A mixture of conjugates each comprising a human growth hormone drug coupled to a polymer having a polyalkylene glycol moiety and a lipophilic moiety that comprises natural fatty acid moieties having 4, 5 or 6 carbon atoms, wherein the mixture has a dispersity coefficient (DC) greater than 10,000 where

$$DC = \frac{\left(\sum_{i=1}^n N_i M_i \right)^2}{\sum_{i=1}^n N_i M_i^2 \sum_{i=1}^n N_i - \left(\sum_{i=1}^n N_i M_i \right)^2}$$

wherein:

n is the number of different molecules in the sample;

N_i is the number of ith molecules in the sample; and

M_i is the mass of the ith molecule.

118. (New) The mixture of claim 117, wherein the lipophilic moiety comprises one or more linear, saturated or unsaturated alkyl moieties having 1 to 28 carbon atoms.

119. (New) The mixture of claim 117, wherein the lipophilic moiety comprises one or more linear, saturated or unsaturated alkyl moieties having 2 to 12 carbon atoms.

120. (New) A mixture of conjugates in which each conjugate:

- (a) comprises a human growth hormone drug coupled to an oligomer comprising a polyalkylene glycol and a lipophilic moiety that comprises one or more linear, saturated or unsaturated alkyl moieties having 1 to 28 carbon atoms; and
- (b) has the same number of polyalkylene glycol subunits.

121. (New) The mixture of claim 120, wherein the lipophilic moiety comprises one or more linear, saturated or unsaturated alkyl moieties having 2 to 12 carbon atoms.

122. (New) The method of claim 120, wherein the lipophilic moiety comprises one or more linear, saturated or unsaturated natural fatty acid moieties having 4, 5 or 6 carbon atoms.